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Developmental trauma, complex PTSD, and the current proposal of *DSM-5*

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This paper evaluates representation of clinical consequences of developmental psychological trauma in the current proposal of *DSM-5*. Despite intensive efforts by its proponents for two decades, it is not known yet if Complex PTSD will take a place in the final version of *DSM-5*. Recognition of dissociative character of several symptom dimensions and introduction of items about negative affects such as shame and guilt imply an indirect improvement toward better coverage of the consequences of developmental trauma in the existing category of PTSD. As disorders with highest prevalence of chronic traumatization in early years of life, dissociative disorders and personality disorder of borderline type are maintained as *DSM-5* categories; however, recognition of a separate type of trauma-related personality disorder is unlikely. While a preschooler age variant of PTSD is under consideration, the proposed diagnosis of Developmental Trauma Disorder (child version of Complex PTSD) has not secured a place in the *DSM-5* yet. We welcome considerations of subsuming Adjustment Disorders, Acute Stress Disorder, PTSD, and Dissociative Disorders under one rubric, i.e., Section of Trauma, Stress, or Event Related Disorders. Given the current conceptualization of *DSM-5*, this paper proposes Complex PTSD to be a subtype of the *DSM-5* PTSD. Composition of a trauma-related disorders section would facilitate integration of knowledge and expertise about interrelated and overlapping consequences of trauma.

Keywords: *Childhood trauma*; *abuse*; *neglect*; *PTSD*; *dissociation*; *DSM-5*; *borderline personality*

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Although not represented in official psychiatric classifications (American Psychiatric Association, 1994; World Health Organization, 1992), Complex PTSD has been proposed by many clinicians and researchers as a diagnostic category for two decades (Courtois, 2004; Herman, 1992; Van der Kolk, 1996). Despite these long-term and intensive efforts, it is not known if this concept will be represented in the final version of *DSM-5* (American Psychiatric Association, 2010). Among others, comorbidity covering multiple spectra of psychopathology and atheoretical character of *DSM* classifications have prevented Complex PTSD from being recognized as a distinct diagnostic category. While patients with Complex PTSD share early life stress in the form of developmental traumata as a common etiological feature, nevertheless, they can also be diagnosed as having somatoform, dissociative, mood, eating, substance use, and/or borderline personality disorders depending on features of the index episode or even concurrently (Van der Kolk, 1996). Thus, rather than from lack of consistent empirical data and missing implications for assessment and treatment, Complex PTSD, as a living entity, has suffered from unresolved conceptual dilemmas. Nevertheless, this nosological fragmentation leads to serious treatment impasses due to the unitary psychopathological process of individuals affected by chronic traumatization in early years of life.

On the other hand, the ongoing revision process of *DSM-5*, which will lead to publication of the final product in 2013, provided a proposal for modified diagnostic criteria of PTSD announced publicly after an elaboration period by the "Anxiety, Obsessive-Compulsive Spectrum, Posttraumatic and Dissociative Disorders Workgroup" of the American Psychiatric Association's *DSM-5* Task Force. Whereas the current proposal of the Work Group does not include a diagnostic category of Complex PTSD

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yet, there are attempts to improve the existing description of PTSD. This paper is concerned with possible implications of these changes for the consequences of developmental trauma and for psychiatric nosology and classification in general. Although not considered a variant of PTSD, *DSM-IV* dissociative disorders and borderline personality disorder have also been taken to discussion as their relationship with chronic developmental trauma is increasingly recognized.

Developmental trauma and complex PTSD

Developmental trauma refers to a type of stressful event that occurs repeatedly and cumulatively, usually over a period of time, and within specific relationships and contexts (Courtois, 2004). Childhood abuse (sexual, emotional, and physical) and neglect (physical and emotional) constitute typical forms of chronic traumatization. Not rarely, families with dysfunctionalities such as, for instance, affect dysregulation among family members may also be developmentally traumatizing for the offsprings (Ozturk & Sar, 2005).

Accordingly, rather than being merely an anxiety dominated response to a single traumatic event, the body of evidence drives clinicians and researchers to conceptualize PTSD also in terms of a maladaptive, long-lasting, and multi-dimensional consequence of chronic, early, and interpersonal (developmental) traumatization that is known to be the essence of Complex PTSD.

On the other hand, whether "Complex" or not, PTSD may have developmental origins: developmental capacities and conditions of early childhood may increase both risk of trauma exposure and the risk that individuals will respond adversely to traumatic exposures (Koenen, Moffitt, Poulton, Martin, & Caspi, 2007). Nevertheless, childhood cumulative trauma but not adult trauma predicts increasing symptom complexity in adults and cumulative trauma predicts increasing symptom complexity among children (Cloitre et al., 2009).

When the *DSM-IV* was under development, the American Psychiatric Association organized a field trial to investigate the impact of proposed changes in the PTSD diagnosis and to explore the psychopathology of chronic developmental trauma (Van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). Findings of the *DSM-IV* field trial supported the existence of a complex adaptation to chronic interpersonal violence, in both children and adults. However, the resulting category labeled DESNOS (disorders of extreme stress not otherwise specified) was listed in the *DSM-IV* under associated and descriptive features of PTSD, but due to the atheoretical character of *DSM-IV* and unresolved problems about comorbidity, not as a freestanding diagnosis.

Early research on the subject revealed that there were seven problem areas associated with early interpersonal trauma (Herman, 1992): alterations in the regulation of affective impulses, attention and consciousness, self-perception, perception of the perpetrator, systems of meaning, and somatization and/or medical problems. Accordingly, the *DSM-IV* described symptoms of DESNOS (Complex PTSD) as follows:

> [I]mpaired affect modulation, self-destructive and impulsive behavior, dissociative symptoms, somatic complaints, feelings of ineffectiveness, shame, despair, or hopelessness, feeling permanently damaged, a loss of previously sustained beliefs, hostility, social withdrawal, feeling constantly threatened, impaired relationships with others, or a change from the individual's previous personality characteristics. (American Psychiatric Association, 1994)

While constituting the main psychopathological dimensions of Complex PTSD, these diverse features lead to elevated numbers of general psychiatric comorbidity from point of view of the existing psychiatric nosology and classifications, both in cross-sectional evaluation and in longitudinal course. Thus, some authors propose that Complex PTSD is associated with PTSD but when present should be considered a superordinate diagnosis (Dorahy et al., 2009). Alternatively, it may also be considered as a subtype of the existing category of PSTD, a potential solution in forthcoming versions of the proposed *DSM-5* criteria to cover chronic developmental traumatization in this domain.

Complex PTSD and dissociation

Dissociation is characterized by a disruption of usually integrated functions of memory, consciousness, identity, or perception of the environment (American Psychiatric Association, 1994). It may also affect somatosensory functions (Nijenhuis, Spinhoven, Van Dyck, Van der Hart, & Vanderlinden, 1996). Both retrospective and prospective studies reveal that dissociation is one of the consequences of developmental trauma (Lewis, Yeager, Swica, Pincus, & Lewis, 1997; Ogawa, Sroufe, Weinfield, Carlson, & Egeland, 1997). Besides constituting a disorder on its own, dissociation may accompany several psychiatric disorders including PTSD. When it does, concurrent dissociation is usually linked to a history of chronic developmental trauma in any psychiatric disorder (Sar & Ross, 2006).

Both peritraumatic and persistent dissociation have been considered at least as components of PTSD with variability between individuals (Briere, Scott, & Weathers, 2005). While assuming dissociation as the central mechanism rather than a peripheral feature of PTSD, some authors propose that Complex PTSD involves a more complex structural dissociation than "simple" PTSD (Van der Hart, Nijenhuis, & Steele, 2005). In accordance with this notion, another study demonstrated that chronic PTSD symptoms can be contributing to the maintenance of clinical dissociation

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and vice versa (Karatzias, Power, Brown, & McGoldrick, 2010). Thus, both studies underline the links between chronicity, complexity, and dissociation in PTSD.

There is a relationship between chronic (complex) types of *DSM-IV* dissociative disorders and Complex PTSD indeed. In fact, dissociation is usually reported to be a component of the latter. Both being closely related to developmental psychological trauma, the former group usually cover patients with more severe dissociation causing disturbance of identity and/or memory as observed in dissociative identity disorder and related types of dissociative disorder not otherwise specified (DDNOS). There may be some overlap between *DSM-IV* category of DDNOS and Complex PTSD; however, this issue requires conceptual clarification and empirical investigation.

Recently, some authors propose a dissociative subtype of PTSD associated with childhood adversity alongside the traumatic event(s) in adulthood leading to the main diagnosis (Ginzburg et al., 2006; Lanius et al., 2010a, 2010b). Taken also the presence of biological evidence for such a distinction, there seem to be merit in further inquiry on this concept. However, while cross-sectional data demonstrate overmodulation and undermodulation as alternative response patterns among patients with PTSD, findings about long-term clinical course of such a subtype is also needed to demonstrate its validity. The dissociative subtype of PTSD may overlap partly with Complex PTSD both in terms of descriptive features and due to its relationship to chronic traumatization.

Although not considered as an official diagnostic category, a psychotic form of PTSD has also been reported (Braakman, Kortmann, & Van den Brink, 2009). There is clinical evidence that among special populations such as immigrants and communities under war conditions, severe stress and very traumatic experiences may take the form of a brief reactive psychosis and not the form of classical PTSD (David, Kutcher, Jackson, & Mellman, 1999; Grisaru, Irwin, & Kaplan, 2003; Kozaric-Kovacic & Borovecki, 2005). In an epidemiological study, this group of subjects endorsed visual, auditory, and tactile hallucinations all high compared to other general population estimates (Shevlin, Armour, Murphy, Houston, & Adamson, in press). The significance of this observation for nosology and classification is not resolved yet. It is possible that these conditions are of dissociative nature (Anketell et al., 2010) called reactive dissociative psychosis previously (Van der Hart, Witztum, & Friedman, 1992). These phenomena may fit one of the two acute dissociative conditions proposed as new types of DDNOS with mixed dissociative symptoms in the *DSM-5*, the more severe one accompanied by psychotic symptoms. Dissociative symptoms are no longer a prerequisite of making a diagnosis of Acute Stress Disorder in the *DSM-5*, thus the newly introduced acute dissociative conditions may catch a sizable patient population with transient reactions to stressful conditions.

PTSD in *DSM-5*: proposed changes in diagnostic criteria

While the proposed *DSM-5* PSTD criteria do not make a link to chronic developmental trauma explicitly, dissociative character of several PTSD symptoms has become prominent in the revised version. However, while delayed onset of PTSD is clarified, the separation of acute versus chronic has been deleted. The reason reported for the latter is lack of evidence supporting such a distinction. Nevertheless, this decision may make coverage of sequelae of chronic developmental trauma in the PTSD domain relatively difficult because they are usually chronic. To inform the reader about current conceptualization of the ultimate trauma-related diagnostic category, we shortly review here the proposed criteria for PTSD in *DSM-5* (American Psychiatric Association, 2010; Friedman, Resick, Bryant, & Brewin, in press). Table 1 summarizes proposed changes in criteria alongside the rationales behind them. The *DSM-IV* and the proposed *DSM-5* diagnostic criteria are listed in summarized form as supplemental material.

Let's begin with definitions of trauma in *DSM-IV* and *DSM-5*. The *DSM-IV* describes a traumatic event in diagnostic criterion A of PTSD. Such an event has to involve actual or threatened death or serious injury, or a threat to the physical integrity of self and others. *DSM-IV* not only limits the noxious factor to an extremely stressful event objectively, but it also takes subjective but explicitly traumatic quality of the response into account. Thus, the person's response has to involve intense fear, helplessness, or horror to meet this criterion. This approach has been consistent with the notion that a noxious event becomes traumatic not only due to its objective but also due to its subjective components (Fischer & Riedesser, 1999).

In the proposal of *DSM-5*, the person's response is thought as having no utility, instead, possible ways of exposition to these events are listed to make the definition of a traumatic event more clear: One option is that the person may have experienced the event(s) himself/herself or may have witnessed, in person, the event(s) as they occurred to others. A further option is learning that the event(s) occurred to a close relative or close friend (in such cases, the actual or threatened death must have been violent or accidental). The fourth and last option is experiencing repeated or extreme exposure to aversive details of the event(s); this does not apply to exposure through electronic media, television, movies, or pictures unless this exposure is work related.

The proposal for *DSM-5* aims at tightening up the criterion to make a better distinction between "traumatic" and events that are distressing but which do not exceed the

Table 1. Proposed changes in diagnostic criteria of PTSD in *DSM-5*

Target definition	Rationale of change	Proposed change
Traumatic experience (Criterion A)	Better distinction of what is traumatic	Death or threatened death, actual or threatened serious injury, or actual or threatened sexual violation, in one or more of the four described ways *DSM-IV* A2 deleted
Intrusion symptoms (Criterion B)	Distinction of depressive ruminations from traumatic memories, nurturing cultural sensitivity, underlining dissociative character of flashbacks	Re-experiencing replaced by intrusion, still five items, recollection replaced by memories, distressing dreams defined broader, recurrence replaced by dissociative reactions
Avoidance of stimuli (Criterion C)	Making exclusive focus on avoidance of subjective reactions, of behaviors, or physical or temporal reminders	Number of items diminished from seven to two, several items moved to new criterion D, reminders grouped as internal and external
Negative alterations in cognitions and mood (*DSM-5* new Criterion D)	New diagnostic cluster dividing *DSM-IV* C criterion based on confirmatory factor analytic studies, nurturing cultural sensitivity	More specific formulation of psychogenic amnesia, expanded reformulation of fore-shortened future, self-blame regarding traumatic event emphasized; wide variety of negative emotional states besides fear, helplessness, and horror emphasized; additions pertaining to the nervous system and soul
Alterations in arousal and reactivity (Criterion E in *DSM-5*, D in *DSM-IV*)	Focus changed from angry feelings (retained in D4) to aggressive behavior, focus on reckless and self-destructive behavior	Alterations (rather than persistent arousal) emphasized, new criterion (on reckless and self-destructive behavior) added (E2)
Duration and impairment (Criteria F and G in *DSM-5*, E and F in *DSM-IV*)	No change	No change
Distinction from organic mental disorder (New Criterion H in *DSM-5*)	Implementation of a general rule of differential diagnosis in *DSM*	Substance effects or general medical condition to be ruled out

"traumatic" threshold. For instance, the proposed *DSM-5* criterion omitted the expression "physical integrity of self and others" and included sexual violation instead. Whereas the proposed criterion A covers objectively traumatic events, this preference may exclude stressful events that, nevertheless, are traumatic subjectively. On the other hand, this revision may also facilitate the inclusion of patients who do not present with fear, helplessness or horror despite being faced with a stressful event of potentially traumatic scope. The latter group may cover conditions with an overmodulated response (Lanius et al., 2010a, 2010b).

The *DSM-5* PTSD criterion B defines "reexperiencing the traumatic event." Instead of labeling this phenomenon as intrusion symptoms, the *DSM-5* underlines that a traumatic event is persistently reexperienced in one (or more) of the ways listed in criterion B. Minor changes have also been proposed for items described in Criterion B. There is an intention to differentiate PTSD-related, spontaneous or triggered recurrent, involuntary, distressing memories from depressive ruminations (B1), and it is made clear that flashbacks are dissociative experiences (B3). Overall, these revisions point to the dissociative (rather than obsessively ruminative) origin of this group of symptoms.

The criterion C describes "avoidance of stimuli." Whereas criterion C is defined as persistent avoidance of stimuli associated with the traumatic event(s), unlike that in the *DSM-IV*, numbing of general responsiveness (such as markedly diminished interest or participation in significant activities, feeling of detachment or estrangement from others, restricted range of affect, sense of a foreshortened future) is kept separate and moved to the newly introduced criterion D. The number of items to fit the criterion C is diminished and limited to internal and external reminders of the event(s).

The newly introduced criterion D (dividing the earlier *DSM-IV* C criterion) is reported to be based on confirmatory factor analytic studies. New items emphasizing self-blame regarding traumatic event (D3) and a wide variety of negative emotional states besides fear, helplessness, and horror (D4) have been introduced. Additions pertaining to the nervous system and soul are aimed at making the criterion more applicable across

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cultures. As a very minor change, more specific formulation of psychogenic (dissociative) amnesia has been made (D1) and an expanded reformulation of fore-shortened future as negative expectations about one's self, others, and one's future is provided (D2). In the criterion E, the first item (E1) changes the focus from angry feelings (retained in D4) to aggressive behavior. The second item (E2) with a focus on reckless and self-destructive behavior is new.

Subjects affected by chronic developmental trauma demonstrate significantly higher levels of physical aggression and self-harm than those with other types of PTSD suggesting the potential role of posttraumatic shame and self-loathing (Dyer et al., 2009). Thus, the new criterion D and the reformulated criterion E added important "affects" to the definition of PTSD. Since these are emotions so frequently mentioned by patients in treatment, this successful revision will not only improve research criteria but also assist clinicians in psychotherapeutic work subsequent to accurate diagnosis.

Basically, the revisions provide a slight shift from an anxiety dominated syndrome toward one of relatively multidimensional character; however, no specific association is made to the potential chronicity or developmental character of the trauma factor itself. Thus, while this shift provides a more sensitive ground for coverage of the consequences of chronic developmental trauma in the existing category of PTSD, the problem remains still unaddressed unless a niche (e.g., a subtype of PTSD devoted to this subject) is created.

Traumatized child and adolescent in the *DSM-5*

Developmental trauma may lead to disorder before adulthood (Cook et al., 2005). Although PTSD in childhood is a well-accepted condition, as like a childhood version of any other psychiatric disorder, there have been strong concerns about limitations of making PTSD diagnosis in children who are exposed to chronic, repetitive, interpersonal (i.e., developmental) trauma such as childhood abuse and neglect. A group of authors propose criteria for Developmental Trauma Disorder as a diagnosis that applies to those conditions that exceed the effects of a single traumatic event (Van der Kolk, 2005).

Children with past or ongoing developmental trauma may also present with dissociative disorders that are similar to their adult forms in symptomatology (Diseth, 2006; Hornstein & Putnam, 1992; Lewis, 1996; Putnam, 1996). There is evidence about dissociative symptoms among children with PTSD (McLewin & Muller, 2006; Steiner, Carrion, Plattner, & Koopman, 2003). Given the relationship between childhood trauma and dissociation among children and adolescents, one may consider the dissociative subtype of PTSD also in these age groups.

According to the report of the American Psychiatric Association *DSM-5* Task Force (2010), both the PTSD and the Dissociative Disorders Sub-Work Groups and the Childhood and Adolescent Disorders Work Group devoted considerable time to discussions of trauma as it impacts expressions of psychopathology in children and adolescents. These discussions focused on three main themes. First, proposed changes to *DSM-5* pertinent to trauma and expressions of psychopathology in preschoolers among Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence. Second, discussions pertinent to trauma and expressions of psychopathology in school-aged children and adolescents (Sheeringa, Zeanah, & Cohen, in press). Third, discussions focused on the merits of a proposal for adding a new syndrome, Developmental Trauma Disorder to *DSM-5* (Van der Kolk, 2005).

Seven criteria have been proposed for PTSD in preschool children (less than 6 years old), which are basically close to those proposed for adult PTSD in *DSM-5*. Only one item is sufficient to satisfy the criterion of negative alterations in cognitions and mood (D) in contrast to the three required for adults. Social withdrawal appears as one item (of criterion D) specific for preschoolers in this proposal.

While there is no official proposal of potential criteria for a possible category of Developmental Trauma Disorder (yet), discussions on PTSD in children and adolescents impacted the addition of notes to the PTSD diagnosis. These notes are contained in the proposed *DSM-5* PTSD diagnosis, where they refer to expressions of PTSD-related symptoms in school-aged children and adolescents. They will certainly facilitate early recognition, however, may not be sufficient to cover all consequences of complex trauma unless associations to a larger spectrum of psychopathology are being made by the clinician. Introduction of a Developmental Trauma Disorder would be certainly most effective to increase the awareness.

Developmental trauma and *DSM-5* personality disorder, borderline type

Developmental trauma and dissociation influence clinical phenomenology of and/or treatment response in several psychiatric disorders including depressive (Gladstone et al., 2004; Nemeroff et al., 2003), schizophrenic (Ross & Keyes, 2004; Sar et al., 2010), conversion (Sar, Akyuz, Kundakci, Kiziltan, & Dogan, 2004), substance use (Tamar-Gürol, Sar, Karadag, Evren, & Karagoz, 2008), and obsessive compulsive disorders (Lochner et al., 2004; Rufer et al., 2006). Among *DSM-IV* personality disorders, borderline personality disorder is associated with the highest prevalence to developmental trauma (Herman, Perry, & Van der Kolk, 1989). Not surprisingly, almost two-thirds of patients who fit the criteria of *DSM-IV* borderline personality disorder have a concurrent dissociative disorder (in the first axis) that is also known to be related to developmental trauma (Sar et al., 2003;

Sar, Akyuz, Kugu, Ozturk, & Ertem-Vehid, 2006; Zittel-Conklin & Westen, 2005).

Actually, high frequency of comorbidities has become a general weakness of personality disorder conceptualization in *DSM-IV*. In accordance with this observation, the *DSM-5* Personality Disorders Work Group recommended a major reconceptualization of personality psychopathology with core impairments in personality functioning, pathological personality traits, and prominent pathological personality types (American Psychiatric Association *DSM-5* Task Force, 2010). According to this new conceptualization, personality disorder is diagnosed when core impairments and pathological traits are severe or extreme and other criteria are met. The Work Group proposes that

> personality disorders represent the failure to develop a sense of self-identity (composed of identity integration, integrity of self-concept, and self-directedness) and the capacity for interpersonal functioning (composed of empathy, intimacy, cooperativeness, and complexity and integration of representations of others) that are adaptive in the context of the individual's cultural norms and expectations.

The Work Group is recommending that the *DSM-IV* borderline personality disorder be reformulated as the borderline type of the single general category of personality disorder with five options for personality types (borderline, antisocial/psychopathic, avoidant, obsessive-compulsive, and schizotypal) in the *DSM-5*. The *DSM-5* general category of personality disorder identifies failure in the development of identity and interpersonal difficulties as its basic features with a particular emphasis on dissociation in the borderline type. In our view, the *DSM-IV* description of borderline personality disorder is overinclusive and catch patients with chronic dissociative disorders (dissociative identity disorder and allied types of DDNOS) who may not have a personality disorder. It is not clear if the proposed revisions on definition of personality disorder in *DSM-5* (and its borderline type) would prevent this overinclusiveness either. According to the criterion D of personality disorder in general, adaptive failure (which has to be associated with one or more personality traits and has to be stable over time according to the criteria B and C) should not be solely explained as a manifestation or consequence of another mental disorder. Thus, the criterion D provides a limit at least principally. However, the shift of the general definition of personality disorder toward a disturbance in self-identity may create a challenge in delineation of a chronic dissociative disorder in conditions when dissociative amnesia is not a prominent part of the clinical picture. Nevertheless, the *DSM-5* Work Group recommends fusion of the first three axes of *DSM-IV* into a single one, which would no longer allow concurrent personality disorder diagnosis in a separate axis. Given the current conceptualization of *DSM-5*, introduction of a category of trauma-related personality disorder is unlikely.

Conclusions

The question remains what to do with the entity called Complex PTSD. Is it a distinct disorder from PTSD, a subtype of PTSD, or an overarching disorder covering PTSD? In terms of the current proposal of *DSM-5*, one possible solution seems to consider it a subtype of PTSD. Nevertheless, such a solution does not prevent new questions from emerging. If it is a subtype, then is it the same or different from dissociative subtype of PTSD? Can dissociation address an entire range of symptoms discussed in Complex PTSD including problems related to social, interpersonal, or attachment difficulties? If not, where should these problems be classified? If Complex PTSD is an overarching one, how does it differ from personality disorder of borderline type? Apparently, neither current body of knowledge nor the existing structure of categorization allow a fully integrated conceptualization, which would become an official reference point for all parties studying diverse clinical consequences of developmental trauma.

Dissociation is increasingly recognized as a common feature in various trauma-related conditions. Alongside dissociative experiences of everyday life, clinical dissociation covers a diagnostic spectrum between mild and severe poles covering acute/transient dissociative conditions, PTSD, Complex PTSD, (complex) chronic dissociative disorders, and borderline phenomena, respectively. While former parts of this spectrum share rather a common ground nosologically, delineation of borderline phenomena as a (severe) personality disorder refers to a qualitatively different section and conceptualization. As the emerging need for a thorough revision in the *DSM-IV* personality disorder section and proposed fusion of the first three diagnostic axes in *DSM-5* inspire, such categorization of borderline phenomena does not require to be adopted necessarily without questioning. One remaining problem about nosology and classification of dissociative disorders is, however, the poor description of most common dissociative disorders as ''not otherwise specified'' alongside classification of somatic dissociative phenomena among somatoform disorders in the *DSM-IV* and potentially in the *DSM-5*. Making focus solely on a single aspect of the spectrum prevents clinicians and researchers from considering dissociation as a general disturbance of self-regulation (Ford, 2009). In fact, a broader understanding of dissociation would not only support new empirical research and novel treatment modalities on trauma-related disorders, but also would facilitate formu-

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lation of new theoretical paradigms necessary to provide integrative solutions for conceptual dilemmas of the field (Sar, 2010; Sar & Ozturk, 2005, 2007).

Psychiatry still allows and even prefers working with concurrent diagnoses (comorbidity) when and where a single point of reference is not possible. The consequences of chronic developmental psychological trauma cover a broad spectrum of disorders in existing nosological systems. Considering the nosological fragmentation about consequences of developmental trauma, besides introduction of a complex subtype of PTSD, classification of trauma, stress, or event-related disorders (Adjustment and Acute Stress Disorders, PTSD, and Dissociative Disorders) in one section would be the most appropriate step forward in the *DSM-5*. This stance has also been proposed for trauma-related disorders among children (Diseth, 2005).

Not only scientific progress, but individual patients may suffer in the medical system due to fragmented perception of consequences of human stress and would benefit from such a cohesive approach. From the clinician's point of view, an ability to comprehend the suffering of patients in an integrated fashion is invaluable for accurate treatment, both psychotherapeutically and biologically. In clinical practice it is well known that the clinical consequences of developmental trauma show themselves as the most difficult and resistant problems patients present with to mental health delivery systems. Rather than being a clue of true treatment-resistance, this common and universal phenomenon may be caused by inability of mental health delivery systems to accurately diagnose and address the needs of these patients. Commonly used diagnosis and treatment modalities may lack the integrated theoretical and technical angle of view necessary to free the patient from the trap he or she is stuck and to assist him or her in moving forward. Composition of a trauma-related disorders section would facilitate integration of knowledge and expertise about interrelated and overlapping consequences of trauma.

Conflict of interest and funding

The author has served as official advisor to the "Anxiety, Obsessive-Compulsive Spectrum, Posttraumatic and Dissociative Disorders Workgroup" of the American Psychiatric Association's *DSM-5* Task Force. The opinions provided here are his own and do not represent necessarily those of the "Workgroup."

References

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: American Psychiatric Association.

American Psychiatric Association. (2010). www.dsm5.org. Washington, DC: American Psychiatric Association.

Anketell, C., Dorahy, M. J., Shannon, M., Elder, R., Hamilton, G., Corry, M., et al. (2010). An exploratory analysis of voice hearing in chronic PTSD: Potential associated mechanisms. *Journal of Trauma and Dissociation*, *11*(1), 93–107.

Braakman, M. H., Kortmann, F. A. M., & Van den Brink, W. (2009). Validity of post-traumatic stress disorder with secondary psychotic features: A review of the evidence. *Acta Psychiatrica Scandinavica*, *119*, 15–24.

Briere, J., Scott, C., & Weathers, F. (2005). Peritraumatic and persistent dissociation in the presumed etiology of PTSD. *American Journal of Psychiatry*, *162*, 2295–2301.

Cloitre, M., Stolbach, B. C., Herman, J. L., Van der Kolk, B., Pynoos, R., Wang, J., et al. (2009). A developmental approach to complex PTSD: Childhood and adult cumulative trauma as predictors of symptom complexity. *Journal of Traumatic Stress*, *22*(5), 399–408.

Cook, A., Spinazzola, J., Ford, J., Lanktree, C., Blaustein, M., Cloitre, M., et al. (2005). Complex trauma in children and adolescents. *Psychiatric Annals*, *35*, 390–398.

Courtois, C. A. (2004). Complex trauma, complex reactions: Assessment and treatment. *Psychotherapy: Theory, Research, Practice, Training*, *41*(4), 412–425.

David, D., Kutcher, G. S., Jackson, E. I., & Mellman, T. A. (1999). Psychotic symptoms in combat-related posttraumatic stress disorder. *Journal of Clinical Psychiatry*, *60*, 29–32.

Diseth, T. H. (2005). Dissociation in children and adolescents as reaction to trauma. An overview of conceptual issues and neurobiological factors. *Nordic Journal of Psychiatry*, *59*, 79–91.

Diseth, T. H. (2006). Dissociation following traumatic medical treatment procedures in childhood: A longitudinal follow-up. *Development and Psychopathology*, *18*, 233–251.

Dorahy, M. J., Corry, M., Shannon, M., MacSherry, A., Hamilton, G., McRobert, G., et al. (2009). Complex PTSD, interpersonal trauma and relational consequences: Findings from a treatment-receiving Northern Irish sample. *Journal of Affective Disorders*, *112*, 71–80.

Dyer, K. F. W., Dorahy, M. J., Hamilton, G., Corry, M., Shannon, M., MacSherry, A., et al. (2009). Anger, aggression, and self-harm in PTSD and complex PTSD. *Journal of Clinical Psychology*, *65*(10), 1099–1114.

Fischer, G., & Riedesser, P. (1999). *Lehrbuch der Psychotraumatologie* [Textbook of Psychotraumatology]. München: Ernst Reinhardt Verlag.

Ford, J. (2009). Dissociation in complex posttraumatic stress disorder or disorders of extreme stress not otherwise specified (DESNOS). In P. F. Dell & J. A. O'Neil (Eds.), *Dissociation and the dissociative disorders: DSM-V and beyond* (pp. 471–483). New York: Routledge.

Friedman, M. J., Resick, P. A., Bryant, R. A., & Brewin, C. R. (in press). Considering PTSD for DSM-5. *Depression and Anxiety*.

Ginzburg, K., Koopman, C., Butler, L. D., Palesh, O., Kraemer, H. C., Classen, C. C., et al. (2006). Evidence for a dissociative subtype of PTSD among help-seeking childhood sexual abuse survivors. *Journal of Trauma Dissociation*, *7*(2), 7–27.

Gladstone, G. L., Parker, G. B., Mitchell, P. B., Malhi, G. S., Wilhelm, K., & Austin, M. P. (2004). Implications for childhood trauma for depressed women: An analysis of pathways from childhood sexual abuse to deliberate self-harm and revictimization. *American Journal of Psychiatry*, *161*(8), 1417–1425.

Grisaru, N., Irwin, M., & Kaplan, Z. (2003). Acute psychotic episodes as a reaction to severe trauma in a population of Ethiopian immigrants to Israel. *Stress and Health*, *19*, 241–247.

Herman, J. L. (1992). Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *Journal of Traumatic Stress*, *5*, 377–391.

Herman, J. L., Perry, C. J., & van der Kolk, B. (1989). Childhood trauma in borderline personality disorder. *American Journal of Psychiatry*, *146*, 490–495.

Hornstein, N. L., & Putnam, F. W. (1992). Clinical phenomenology of child and adolescent dissociative disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, *31*, 1077–1085.

Karatzias, T., Power, K., Brown, K., & McGoldrick, T. (2010). Posttraumatic symptomatology and dissociation in outpatients with chronic posttraumatic stress disorder. *Journal of Trauma & Dissociation*, *11*, 83–92.

Koenen, K. C., Moffitt, T. E., Poulton, R., Martin, J., & Caspi, A. (2007). Early childhood factors associated with the development of posttraumatic stress disorder: Results from a longitudinal birth cohort. *Psychological Medicine*, *37*(2), 181–192.

Kozaric-Kovacic, D., & Borovecki, A. (2005). Prevalence of psychotic comorbidity in combat- related post-traumatic stress disorder. *Military Medicine*, *170*, 223–226.

Lanius, R. A., Frewen, P. A., Vermetten, E., & Yehuda, R. (2010a). Fear conditioning and early life vulnerabilities: Two distinct pathways of emotional dysregulation and brain dysfunction in PTSD. *European Journal of Psychotraumatology*, *1*, 5467. DOI: 10.3402/ejpt.v1i0.5467

Lanius, R. A., Vermetten, E., Loewenstein, R. J., Brand, B., Schmahl, C., Bremner, J. D., et al. (2010b). Emotion modulation in PTSD: Clinical and neurobiological evidence for a dissociative subtype. *American Journal of Psychiatry*, *167*, 640–647.

Lewis, D. O. (1996). Diagnostic evaluation of the child with dissociative identity disorder. *Child and Adolescent Psychiatric Clinics of North America*, *5*, 303–332.

Lewis, D. O., Yeager, C. A., Swica, Y., Pincus, J. H., & Lewis, M. (1997). Objective documentation of child abuse and dissociation in 12 murderers with dissociative identity disorder. *American Journal of Psychiatry*, *154*, 1703–1710.

Lochner, C., Seedat, S., Hemmings, S. M. J., Kinnear, C. J., Corfield, V. A., Niehaus, D. J. H., et al. (2004). Dissociative experiences in obsessive-compulsive disorder and trichotillomania: Clinical and genetic findings. *Comprehensive Psychiatry*, *45*, 384–391.

McLewin, L. A., & Muller, R. T. (2006). Childhood trauma, imaginary companions, and the development of pathological dissociation. *Aggression and Violent Behavior*, *11*, 531–545.

Nemeroff, C. B., Heim, C. M., Thase, M. E., Klein, D. N., Rush, A. J., Schatzberg, A. F., et al. (2003). Differential responses to psychotherapy versus pharmacotherapy in patients with chronic forms of major depression and childhood trauma. *Proceedings of the National Academy of Sciences, USA*, *100*, 14293–14296.

Nijenhuis, E. R. S., Spinhoven, P., Van Dyck, R., Van der Hart, O., & Vanderlinden, J. (1996). The development and psychometric characteristics of the Somatoform Dissociation Questionnaire (SDQ-20). *Journal of Nervous and Mental Disease*, *184*, 688–694.

Ogawa, J. R., Sroufe, L. A., Weinfield, N. S., Carlson, E. A., & Egeland, B. (1997). Development and the fragmented self: Longitudinal study of dissociative symptomatology in a nonclinical sample. *Development and Psychopathology*, *9*, 855–879.

Ozturk, E., & Sar, V. (2005). Apparently normal family: A contemporary agent of transgenerational trauma and dissociation. *Journal of Trauma Practice*, *4*(3/4), 287–303.

Putnam, F. W. (1996). *Dissociation in children and adolescents.* New York: Guilford Press.

Ross, C. A., & Keyes, B. (2004). Dissociation and schizophrenia. *Journal of Trauma and Dissociation*, *5*(3), 69–83.

Rufer, M., Held, D., Cremer, J., Fricke, S., Moritz, S., Peter, H., et al. (2006). Dissociation as a predictor of cognitive behavior therapy outcome in patients with obsessive-compulsive disorder. *Psychotherapy and Psychosomatics*, *75*, 40–46.

Sar, V. (2010). Dissociative depression: A common cause of treatment resistance. In W. Renner (Ed.), *Female Turkish migrants with recurrent depression*. Innsbruck: Studia.

Sar, V., Akyuz, G., Kugu, N., Ozturk, E., & Ertem-Vehid, H. (2006). Axis-I dissociative disorder comorbidity of borderline personality disorder and childhood trauma reports. *Journal of Clinical Psychiatry*, *67*(10), 1583–1590.

Sar, V., Akyuz, G., Kundakci, T., Kiziltan, E., & Dogan, O. (2004). Childhood trauma, dissociation and psychiatric comorbidity in patients with conversion disorder. *American Journal of Psychiatry*, *161*, 2271–2276.

Sar, V., Kundakci, T., Kiziltan, E., Yargic, L. I., Tutkun, H., Bakim, B., et al. (2003). Axis I dissociative disorder comorbidity of borderline personality disorder among psychiatric outpatients. *Journal of Trauma and Dissociation*, *4*, 119–136.

Sar, V., & Ozturk, E. (2005). What is trauma and dissociation? *Journal of Trauma Practice*, *4*(1–2), 7–20.

Sar, V., & Ozturk, E. (2007). Functional dissociation of the self: A sociocognitive approach to trauma and dissociation. *Journal of Trauma and Dissociation*, *8*(4), 69–89.

Sar, V., & Ross, C. A. (2006). Dissociation as a confounding factor in psychiatric research. *Psychiatric Clinics of North America*, *29*, 129–144.

Sar, V., Taycan, O., Bolat, N., Özmen, M., Duran, A., & Öztürk, E. et al. (2010). Childhood trauma and dissociation in schizophrenia. *Psychopathology*, *43*, 33–40.

Sheeringa, M. S., Zeanah, C. H., & Cohen, J. A. (in press). PTSD in children and adolescents. Toward an empirically based algorithma. *Depression & Anxiety.*

Shevlin, M., Armour, C., Murphy, J., Houston, J. E., & Adamson, G. (in press). Evidence for a psychotic posttraumatic stress disorder subtype based on the National Comorbidity Survey. *Social Psychiatry and Epidemiology.*

Steiner, H., Carrion, V., Plattner, B., & Koopman, C. (2003). Dissociative symptoms in posttraumatic stress disorder: Diagnosis and treatment. *Child and Adolescent Psychiatric Clinics of North America*, *2*, 231–249.

Tamar-Gürol, D., Sar, V., Karadag, F., Evren, C., & Karagoz, M. (2008). Childhood emotional abuse, dissociation and suicidality among patients with drug dependency in Turkey. *Psychiatry and Clinical Neurosciences*, *62*(5), 540–547.

Van der Hart, O., Nijenhuis, E. R. S., & Steele, K. (2005). Dissociation: An insufficiently recognized major feature of complex posttraumatic stress disorder. *Journal of Traumatic Stress*, *18*(5), 413–423.

Van der Hart, O., Witztum, E., & Friedman, B. (1992). From hysterical psychosis to reactive dissociative psychosis. *Journal of Traumatic Stress*, *6*, 43–64.

Van der Kolk, B. A. (1996). The complexity of adaptation to trauma: Self-regulation, stimulus discrimination, and characterological development. In B. A. Van der Kolk, A. McFarlane, & L. Weisaeth (Eds.), *Traumatic stress* (pp. 182–213). New York: Guilford Press.

Van der Kolk, B. A. (2005). Developmental trauma disorder. A new, rational diagnosis for children with complex trauma histories. *Psychiatric Annals*, *35*(5), 401–408.

Van der Kolk, B. A., Roth, S., Pelcovitz, D., Sunday, S., & Spinazzola, J. (2005). Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *Journal of Traumatic Stress*, *18*(5), 389–399.

World Health Organization. (1992). *International classification of diseases, 10th Edition (ICD-10)*. Geneva: World Health Organization.

Zittel-Conklin, C., & Westen, D. (2005). Borderline personality disorder in clinical practice. *American Journal of Psychiatry*, *162*, 867–875.

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